

**Dept of Information Technology
Informational Workshop**

**Rate Development Model
for
DoIT Services**

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Why DoIT Bills For Services

- NRS 242 Created the Department of Information Technology (DoIT) for the Purpose of Providing Information Services for State Agencies.
- Some State Agencies Receive Federal Matching Funds in Addition to State “General Funds”.
- This Provides Agencies the Ability to Increase Their “Buying” Power by Using Federal Matching Funds to Pay for Services Provide by DoIT.

Internal Service Fund

- NRS 242.211: DoIT Shall Operate as an Internal Service Fund (ISF)
- Agencies Using DoIT Services Shall Pay DoIT for Those Services
- All DoIT Costs Shall Be Recovered from Fees Charged for Services Provided to Other Agencies
- DoIT Is Not Budgeted “General Funds” Money

Internal Service Fund

(Continued)

- Rate Development Methodology MUST Comply w/OMB Circular A-87 (Cost Principles for State, Local, and Indian Tribal Governments)
- Same “Service” Rate for Each Customer
- Maximum of 60 Days of Operating Costs Authorized in Reserve per Budget Account

Rate Model Development Concept

- Determine Unit of Measure for the Service (e.g. Hourly, Minutes, Number of Lines, etc.)
- Estimate Total Annual Demand for the Service (Utilization)
- Compute Total Budgeted Cost to Provide the Service (Cost Allocation Methodology)
- Rate = Total Budgeted Cost/Utilization
(Price/Unit)

Rate Model Methodology

Goals

- Total Cost of Each Service Represents ONLY:
 - Direct Costs of Providing that Service
 - Fair Share of DoIT “Indirect/Overhead” Costs
- DoIT Services Rates SHOULD:
 - Be Sufficient to Recoup All of DoIT’s Annual Costs
 - Not Result in Inflated Reserves
 - Be Stable and Consistent from Year to Year
 - Account for Total Expected Utilization of the Service
- No Rate Adjustments Required Mid-Year
- Comply with Federal Guidelines

DoIT Budget Accounts (B/A)

- 1365: Application Design & Development
- 1370: Policy, Planning, Research, & Project Oversight
- 1373: Director's Office (Security & Contracts)
- 1385: Computing
- 1386: Data Communication & Technical Services
- 1387: Telecommunications
- 1388: Network Transport Services

DoIT Services

Hourly Billable

- Programmer/Developer
- Data Base Administrator
- PC/LAN Technician
- Project Manager
- Quality Assurance
- Project Oversight

DoIT Services (Continued)

Computing Services

- Batch
 - Per CPU Minutes
- TSO (Time Sharing Option)
 - Per CPU Minutes
- CICS (Customer Information Control System)
 - Per CPU Minutes
- DB2 (Database Management System)
 - Per CPU Minutes
- ADABAS (Database Management System)
 - Per CPU Minutes

DoIT Services (Continued)

Computing Services (Continued)

- Tape Input/Output
 - Per 1000 I/O Transactions
- Tape Storage
 - Per Tape Per Day
- DISK I/O
 - Per 1000 I/O Transactions
- DISK Storage
 - Per Megabyte Per Day
- Print Management
 - Per 1000 Lines

DoIT Services (Continued)

Computing Services (Continued)

- UNIX Support
 - Per Processor Per Year
- Server/Non-Server Hosting
 - Per Server/Device Per Month
- Web Services
 - Per Monthly Tier
- E-mail Services
 - Per Account Per Month
- Data Base Hosting
 - Per Monthly Tier

DoIT Services (Continued)

Wide Area Network

- Dial Up Access
 - Per Connection Account Per Month
- Silvernet Access
 - Per Monthly Tier
- Direct Connection Broadband (aka DSL 128 Link)
 - Per Connection Account Per Month
- VPN Secure Link (Virtual Private Network)
 - Per Connection Account Per Month

DoIT Services (Continued)

Telecommunication

- State Phone Line
 - Per Line Per Month
- Voice Mail
 - Per Account Per Month
- Long Distance
 - Per Minute
- 800 Toll Free Service
 - Per Minute

DoIT Services (Continued)

Telecommunication (Continued)

- Phone Credit Card
 - Per Minute
- Work Order Administration
 - Percent Added to Work Order
- Voice System Administration
 - Per Port Per Month
- PBX Network Access
 - Per Connection Per Month

DoIT Services (Continued)

Network Transport

- Site Space Rent
 - Per Rack Per Year
- Channel Rent
 - Per Channel End Per Year
- DS1 Circuit
 - Per Circuit Per Month
- Site Power Recovery
 - Per Hi Power System Per Year

DoIT Services (Continued)

Assessments

- Infrastructure (aka Enterprise Access)
 - Per FTE Per Year for All Executive Branch Agencies
- Security
 - Per FTE Per Year for All Executive Branch Agencies
- Contract Administration
 - Per FTE Per Year for All Executive Branch Agencies
Less NRS 242.131 Exceptions
- Planning
 - Per FTE Per Year for All Executive Branch Agencies
Less NRS 242.131 Exceptions

DoIT FY 06 Services Defined

- Description of DoIT Services (e.g. Cost Pools) are Available at:
<http://doit.nv.gov/fiscal.htm>

DoIT Services Utilization

- During the Budget Development Process, State Agencies Use DoIT's M-Forms to Estimate Their Future Requirements for DoIT Services
- DoIT Reviews State Agencies' M-Forms and Validates Utilization
 - Provides DoIT Information on Changes in Capacity to DoIT Infrastructure Which Could Impact DoIT's Budgets
- Customer Agencies Record Their Utilization Projections for DoIT Services in NEBS During the Budgeting Process

DoIT Services Utilization

(Continued)

- DoIT Managers Reviews Utilization Projections with the Budget Office and Customer Agencies Again.
- Non-State Agency Utilization Projections are Incorporated
 - Boards and Commissions
 - Counties
 - Federal Agencies
 - Private Entities
- Total Projected Utilizations for Each Service for the Year are Computed

Cost Allocation Methodology

- Review Each B/A's Budget to Determine Allowable Costs for Rate Development Purpose.
- Allocate "Direct Costs" to Specific Functions Supporting a Service within the B/A
- Allocate "Indirect or Overhead Costs" Across ALL Functions Based on Accepted Methodology:
 - Percent of Total Department Budget
 - Percent of Total Department FTE

Cost Allocation Terms

- **Direct Costs:** DoIT Budgeted Costs Allowed by OMB Circular A-87 Directly in Support of a Service
 - Salary of Personnel Providing the Service
 - Travel and Training for Personnel Providing the Service
 - Rent and Utilities Supporting the Service
 - Non Capital Purchases of Materials and/or Services Supporting the DoIT Service
- **Indirect/Overhead Costs:** DoIT Budgeted Costs Allowed by OMB Circular A-87 Not in Direct Support of a Service
 - DoIT Fiscal Staff Costs (Salaries, Rent, Equipment, etc)
 - Management Costs (Salaries, Travel, Training, etc)

Cost Allocation Terms

(Continued)

- **Allowed Costs:** DoIT Budgeted Direct and Indirect Cost Authorized by OMB Circular A-87 to be Included in Rates Charged for Services Provided to State Agencies that Pay for a Portion of Those Services with Federal Funds (e.g. Welfare and Medicaid Federal Matching Funds, Federal Highway Funds, etc).
 - Salary
 - Travel
 - Training
 - Minor Equipment
 - Utilities
 - Rent
 - Operating Supplies
 - Data Processing Costs

Cost Allocation Terms

(Continued)

- **Disallowed Costs:** DoIT Budgeted Direct and Indirect Cost NOT Authorized by OMB Circular A-87 to be Included in Rates Charged for Services Provided to State Agencies that Pay for a Portion of Those Services with Federal Funds (e.g. Welfare and Medicaid Federal Matching Funds, Federal Highway Funds, etc).
 - Capital Investment Cost (Equipment and/or Software with a Unit Cost of \$5,000 or more)
 - Repayment of Debt Used to Purchase Capital Investment Items
 - Reserve

Cost Allocation Terms

(Continued)

- **Reserve:** DoIT Budgeted Cost Authorized by OMB Circular A-87 to Support Up to 60 Days of Operating Expenses. This Becomes the Next Fiscal Year's Balance Carried Forward
 - DoIT's Source of Cash to Start a New Fiscal Year
 - Billing Cycle: 1 ½ Month Delay
- **Estimated Balance Carried Forwarded:** The Projected "Cash" On-Hand at the End of the Fiscal Year that will be Available to Use During the Next Fiscal Year. This is Computed During the Legislative Session and Used to Determine if a Cost Adjustment to the Rate Model is Necessary.

Cost Allocation Terms

(Continued)

- **Cost Adjustments:** DoIT Non Budgeted Costs Authorized by OMB Circular A-87 to be Included in Rates Charged for Services Provided to State Agencies that Pay for a Portion of Those Services with Federal Funds (e.g. Welfare and Medicaid Federal Matching Funds, Federal Highway Funds, etc).
 - Depreciation on Capital Investment Items
 - Reserve Adjustments: An Increase or Decrease Included in the Total Cost of a Service to Achieve the 60 Day Reserve Target by the End of the Fiscal Year. Any Adjustment is Based on Estimated Balance Carried Forwarded.

Rate Development Example

				1386 Expenses						
Department total			\$4,108,763							
Expense total			\$4,108,763							
Description	Spread	Type	Total	Tech Unit O/H	Data Com O/H	Dial Up	DSL 128	Silvernet	VPN	PC/LAN Techs
SALARIES & WAGES			\$1,639,304	\$81,529	\$125,719	\$7,860	\$37,844	\$466,904	\$28,117	\$891,331
In State Travel (CAT 03 - Total)	Salary		\$24,032							
Operating Expenses (CAT 04 - Total)	Salary		\$82,757							
Director's Allocation (CAT 10 - Total)	Salary		\$257,324							
General Fund Payback (CAT 11 - Total)	Disallowed		\$5,000							
Debt Service (CAT 12 - Total)	Disallowed		\$43,580							
DP Operating Supplies 7020 (CAT 26 - Partial)	Percent		\$4,439					97%	3%	
DP Software Maint 7073 (CAT 26 - Partial)	Percent		\$67,700					80%	20%	
DP Hardware Maint 7074 (CAT 26 - Partial)	Percent		\$157,366			2%		98%		
Tele Tail Circuits 7290 (CAT 26 - Partial)	Percent		\$491,729			2%		98%		
Software > 5K (CAT 26 - Partial)	Disallowed		\$12,000							
Equipment > 5K (CAT 26 - Partial)	Disallowed		\$436,011							
DP Expenses Other (CAT 26 - Partial)	Percent		\$120,304	70%				30%		
Training (CAT 30 - Total)	Salary		\$62,197							
Reserve (CAT 86 - Total)	Disallowed		\$664,353							
Purchasing Assessment (CAT 87 - Total)	Salary		\$9,214							
State Cost Recovery (CAT 88 - Total)	Salary		\$31,453							
Depreciation (CAT - None)		Cost Adjustment	\$248,064					\$242,153		\$5,911

Rate Development Example

Continued)

				1386 Expenses						
Department Budget Total			\$4,108,763							
Expense total			\$4,108,763							
Description	Spread	Type	Total	Tech Unit O/H	Data Com O/H	Dial Up	DSL 128	Silvernet	VPN	PC/LAN Technicians
SALARIES & WAGES			\$1,639,304	\$81,529	\$125,719	\$7,860	\$37,844	\$466,904	\$28,117	\$891,331
In State Travel (CAT 03 - Total)	Salary		\$24,032	1,195.21	1,843.03	115.23	554.79	6,844.76	412.19	\$13,067
Operating Expenses (CAT 04 - Total)	Salary		\$82,757	4,115.83	\$6,347	\$397	1,910.48	\$23,571	\$1,419	\$44,997
Director's Allocation (CAT 10 - Total)	Salary		\$257,324	12,797.73	\$19,734	\$1,234	5,940.43	\$73,291	\$4,414	\$139,914
General Fund Payback (CAT 11 - Total)	Disallowed		\$5,000							
Debt Service (CAT 12 - Total)	Disallowed		\$43,580							
DP Operating Supplies 7020 (CAT 26 - Partial)	Percent		\$4,439					\$4,306	\$133	
DP Software Maint 7073 (CAT 26 - Partial)	Percent		\$67,700					\$54,160	\$13,540	
DP Hardware Maint 7074 (CAT 26 - Partial)	Percent		\$157,366			\$3,147		\$154,219		
Tele Tail Circuits 7290 (CAT 26 - Partial)	Percent		\$491,729			\$9,835		\$481,894		
Software > 5K (CAT 26 - Partial)	Disallowed		\$12,000							
Equipment > 5K (CAT 26 - Partial)	Disallowed		\$436,011							
DP Expenses Other (CAT 26 - Partial)	Percent		\$120,304	\$84,213				\$36,091		
Training (CAT 30 - Total)	Salary		\$62,197	3,093.30	4,769.92	298.22	1,435.84	17,714.85	1,066.79	\$33,818
Reserve (CAT 86 - Total)	Disallowed		\$664,353							
Purchasing Assessment (CAT 87 - Total)	Salary		\$9,214	458.25	\$707	\$44	212.71	\$2,624	\$158	\$5,010
State Cost Recovery (CAT 88 - Total)	Salary		\$31,453	1,564.28	\$2,412	\$151	726.11	\$8,958	\$539	\$17,102
Depreciation (CAT - None)		Cost Adjustment	\$248,064					\$242,153		\$5,911
Total				\$188,966	\$161,532	\$23,081	\$48,624	\$1,572,731	\$49,800	\$1,151,149

September 28, 2005

Rate Development Example

(Continued)

Department	Tech Unit O/H	Data Com O/H	Dial Up	DSL 128	Silvernet	VPN	PC/LAN Technicians
Total	100	100	100		100	100	100
8681 - PC/LAN Technicians	100%						100%
8684 - Dial Up Access		25%	100%				
8685 - Silvernet Access		25%			100%		
8694 - DSL 128		25%		100%			
8696 - VPN		25%				100%	

Department	Tech Unit O/H	Data Com O/H	Dial Up	DSL 128	Silvernet	VPN	PC/LAN Technicians
Total	100	100	100		100	100	100
8681 - PC/LAN Technicians	\$188,966						\$1,151,149
8684 - Dial Up Access		\$40,383	\$23,081				
8685 - Silvernet Access		\$40,383			\$1,572,731		
8694 - DSL 128		\$40,383		\$48,624			
8696 - VPN		\$40,383				\$49,800	
	\$188,966	\$161,532	\$23,081	\$48,624	\$1,572,731	\$49,800	\$1,151,149

Rate Development Example

(Continued)

IVA/Cap95				
11/19/2004				Schedule G
		Origin of Costs		
Grantee Departments	Director's Office	Data Com	Network Transport Services	Total
Director's Allocation	\$1,354,124			\$1,354,124
Contract Administration	\$418,320			\$418,320
PC/LAN Technicians		\$1,340,116		\$1,340,116
Dial Up Access		\$63,464		\$63,464
Silvernet Access		\$1,613,114	\$323,913	\$1,937,027
DSL 128		\$89,007		\$89,007
VPN		\$90,183		\$90,183
Total	\$1,772,444	\$3,195,883	\$323,913	\$5,292,240

Rate Development Example

(Continued)

Nevada Department of Information Technology Rates - FY 2005					
Service	Budget Cost	Quantity	Rate Unit	Rate	Per Month
IT Labor					
PC/LAN Technician	\$1,340,116	27,919.1	Per Hour	\$ 48.00	
Silvernet Wide Area Network Services					
Dial Up Access	\$63,464	459.9	Per Connection Acct Per Month	\$ 138.00	\$11.50
Silvernet Access	\$1,937,027		Per Monthly Tier	See Schedule	
DSL 128 Link	\$89,007	98.4	Per Connection Per month	\$ 904.54	\$75.38
VPN Secure Link	\$90,183	3,400.0	Per Connection Acct Per Month	\$ 26.52	\$2.21
Assessments					
Contract Administration	\$418,320	10,701.0	Per FTE Per Year	\$ 39.09	
DEPARTMENT OF INFORMATION TECHNOLOGY BILLING RATES FY 2005 - TIER SCHEDULE					
Usage Tier		FY 2005 Monthly Rate			
0 to 5 gigabits		\$160.67			
5.01 to 10 gigabits		\$321.35			
10.01 to 20 gigabits		\$642.69			
20.01 to 40 gigabits		\$1,285.39			
40.01 to 80 gigabits		\$2,570.77			
80.01 to 160 gigabits		\$5,141.55			
160.01 to 320 gigabits		\$10,283.10			
320.01 to 640 gigabits		\$20,566.20			
640.01 to 1280 gigabits		\$41,132.39			

Rate Development Methodology

- Use Software Package “CAP 95” to Allocate Costs to Functions and Services
- Each DoIT Position’s Salary and Benefit Costs are Allocated to Functional Areas
- Allocated Salaries (CAT 01) Input into CAP 95
- All Expenses (CAT 02, 03, etc) from DoIT’s Budget Input into CAP 95
- Depreciation Expenses for Capital Purchases are Input into CAP 95

Rate Development Methodology

(Continued)

- Costs are Allocated to Functions:
 - Same Ratio as Salaries
 - Designated Percentage
 - By Actual Dollar Values
- **Exceptions – Costs Excluded:**
 - Costs of Capital Expenditures (>\$5K)
 - General Fund Payback
 - Debt Services
 - Reserve

Rate Development Methodology

(Continued)

- Functional Costs are Distributed Across Services
 - Percentage or Ratio
- CAP 95 Computes Total Costs (Direct and Indirect) Allocated to Each DoIT Service
- CAP 95 Reports Identify Source, by B/A, of Costs Included for Each Service

Rate Development Methodology

(Continued)

- Service Rate:
 - Rate = Total Cost for Service/Projected Utilization
 - Some Rates are Converted to a “Tier” or “Band of Level of Service” Structure
- Assessments:
 - Based on Total FTE of Agencies Receiving Benefit of the Service
 - Monthly Assessment = $(\text{Total Cost} / \text{Total FTE}) * (\text{FTE of Agency Receiving Benefit})$

Budget Impact

- Customers Identify Requirements (NEBS)
- DoIT Determines Total Cost for Each Service
- Customers Input Projected Utilization (NEBS)
- $\text{Rate} = \text{Total Cost} / \text{Total Projected Utilization}$
- $\text{Customer Budget} = \text{Projected Utilization} * \text{Rate}$

Rate Computation - Example

- DoIT's Cost of Service – Programmer/Developer
 - Payroll Costs: \$650,000
 - Operating Expenses: \$6,000
 - Training: \$5,000
 - Information Services: \$5,100
 - Director's Assessment: \$90,000
 - Deprecation: \$1,000
 - Total Cost of Service: **\$757,100**
- Agencies' Utilization:
 - B/A 1320: 400 Hrs
 - B/A 1363: 6,600 Hrs
 - B/A 3178: 1,900 Hrs
 - B/A 4682: 1,050 Hrs
 - Total Projected Utilization: **9,950 Hrs**
- Rate = Cost/Utilization:
 - $\$757,100 / 9950 \text{Hrs} = \mathbf{\$76.09/\text{Hr}}$

Agency Budgets – Example

(Utilization * Rate = Budgeted Amount)

- B/A 1320
 - CAT 26 - G/L: 7510 (400 Hrs*\$76.09): \$30,436
- B/A 1363
 - CAT 26 - G/L: 7510 (6,600 Hrs*\$76.09): \$502,194
- B/A 3178
 - CAT 26 - G/L: 7510 (1,900 Hrs*\$76.09): \$144,571
- B/A 4682
 - CAT 26 – G/L: 7510 (1,050 Hrs*\$76.09): \$79,895
- Total G/L 7510: \$757,098
- Total DoIT Cost Service: \$757,100

User Agencies' Budgets

- DoIT Verifies Utilizations Provided to Budget Office
- DoIT Computed Rates Provided to Budget Office
- Budget Office Determines Dollar Amount to Include in Agency's Budget to Pay for Projected DoIT Service Usage

Rate Development Timeline

- NLT July 1, Even Number Year (YYEVEN)
 - DoIT Customer Agencies Submit M-Forms to DoIT for Review, Validation, and Revision
- September 1, YYEVEN
 - Agency Budgets and Utilizations Recorded in NEBS
- Between Sept 1 & Dec 31 YYEVEN
 - DoIT Reviews Agencies' Utilization
 - DoIT and Budget Office Reviews DoIT's Budget
 - Budget Office Works with DoIT Customer Agencies to Adjust Utilization if Required

Rate Development Timeline

(Continued)

- December 31, YYYYEven
 - Develop Initial Biennium Rates Based on DoIT's Governor Recommended Budget and Agencies' Utilization in NEBS
- February, YYYYOdd
 - Legislature Meets and Reviews ALL Budget
- May 31, YYYYOdd
 - Develop Legislatively Approved Biennium DoIT Rates Based on DoIT's Legislative Approved Budget and Agencies' Legislative Approved Utilizations
- July 1, YYYYOdd and YYYY Even
 - Start Billing Customers Based on Legislative Approved Rates

Budget Execution Issues

- Customer Agencies Under Utilize a Service
 - Many of DoIT's Costs are Fixed
 - Revenue Shortage – Not Sufficient to Cover Costs
 - Potential for Mid-Year Rate Adjustment
 - Possible Negative Impact on Customers Meeting Projected Utilizations – Budget Shortfall

DoIT Services Unit of Measure

(Billing Unit)

- Are They Correct?
- Is There a Better Method to Measure the Services Provided by DoIT?
 - More Tier'ed Services?
- Any Interest in Development of a “Rate Development Discussion Group”

Conclusion

- Customer Agency Contact
- Questions
- Future Workshops
- Contact Information
 - Shelly Person – Chief of Administration
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